

SECTION CC-1 NSN/ITEM DESCRIPTION

PCR-B-010 BEEF ENCHILADA IN SAUCE, PACKAGED IN A FLEXIBLE POUCH, SHELF STABLE

Each component is consumed by combat personnel under worldwide environmental extremes as part of an operational ration, and is a source of nutritional intake.

C-2 PERFORMANCE REQUIREMENTS

A. Product standard. A sample shall be subjected to first article or product demonstration model inspection as applicable, in accordance with the tests and inspections of Section E of this Performance-based Contract Requirements document.

B. Commercial sterility. The packaged food shall be processed until commercially sterile.

C. Shelf life. The packaged food shall meet the minimum shelf life requirement of 36 months at 80°F.

D. Appearance.

(1) Tortilla. The tortilla shall be typical of tortilla made from enriched yellow corn meal and shall be a medium to dark yellow color. There may be a reddish color from absorbed sauce.

(2) Beef filling. The beef filling shall be finely ground beef with a medium brown color typical of cooked, ground beef.

(3) Sauce. The sauce shall be red to reddish-brown color with pieces of tomato, onion, green pepper, herbs, and Mexican-style seasoning and spices.

(4) General. The enchilada shall be a yellow corn tortilla wrapped around beef filling and shall be intact. The enchilada shall be covered with a tomato-based sauce with pieces of tomato, onion, green pepper, herbs, and Mexican-style seasoning and spices. The packaged food shall be free from foreign materials.

E. Odor and flavor.

(1) General. The packaged beef enchilada and sauce shall have an odor and flavor characteristic of beef enchilada and tomato-based sauce with pieces of tomato, onion, green pepper, herbs, and Mexican-style seasoning and spices. The beef enchilada and sauce shall elicit a sensation of medium heat.

(2) Foreign. The packaged beef enchilada and sauce shall be free from foreign odors and flavors.

SECTION C CONTINUEDF. Texture.

- (1) Tortilla. The tortilla shall be soft.
- (2) Beef filling. The beef shall be finely ground and shall be moist.
- (3) Sauce. The sauce shall be moderately thick with pieces of tomato, onion, green pepper, and herbs.

G. Weight.

(1) Net weight. The average net weight of the pouched product with beef enchilada and sauce shall be not less than 8.0 ounces. No individual pouch shall contain less than 7.5 ounces.

(2) Beef filling. The enchilada shall be typically produced with a beef filling weight of 1.9 ounces.

H. Palatability and overall appearance. The finished product shall be equal to or better than the approved product standard in palatability and overall appearance.

I. Nutrient content.

- (1) Protein content. The protein content shall be not less than 5.0 percent.
- (2) Fat content. The fat content shall be not greater than 6.0 percent.
- (3) Salt content. The salt content shall be not greater than 1.2 percent.

C-3 MISCELLANEOUS INFORMATION

THE FOLLOWING LIST OF INGREDIENTS IS PROVIDED FOR INFORMATION ONLY AND IS NOT A MANDATORY CONTRACT REQUIREMENT.

A. Ingredients. Ingredients for the beef enchilada in sauce may be as follows: beef, crushed tomatoes, enriched corn meal, beef broth, water, vegetable oil, enriched wheat flour, chili pepper, paprika, sugar, salt, onions, green peppers, garlic powder, cumin, pepper, herbs, and spices.

SECTION DD-1 PACKAGING

One beef enchilada and sauce shall be filled into pouches and each pouch shall be packed in a carton in accordance with MIL-PRF-44073E, Packaging of Food in Flexible Pouches.

D-2 LABELING

A. Pouches. Each pouch shall be clearly printed or stamped, in a manner that does not damage the pouch, with permanent black ink or any other contrasting color, which is free of carcinogenic elements or ingredients. To avoid erroneous marking of pouches, the product name, lot number and filling equipment number shall be applied prior to thermal processing. All other marking may be applied before or after thermal processing.

(1) Product name (not less than 1/8 inch high). Commonly used abbreviations may be used when authorized by the inspection agency.

- (2) Pouch code includes: 1/
Lot Number
Filling equipment identification number
Official establishment number (for example, EST-38)
(applicable to class 1 and 3 only)
Retort identification number 2/
Retort cook number 2/

1/ Shall be code marked as follows: The lot number shall be expressed as a four digit Julian code. The first digit shall indicate the year of production and the next three digits shall indicate the day of the year (Example, March 19, 1995 would be coded as 5078). The Julian code shall represent the day the product was packaged into the pouch and processed. Sub-lotting (when used) shall be represented by an alpha character immediately following the four digit Julian code. Following the four digit Julian code and the alpha character (when used), the other required code information shall be printed in the sequence as listed above. For food products that do not require an establishment number, the Julian code shall be preceded by three capital letters, which represent the packer's name.

2/ Required only when retort process used

B. Cartons.

(1) The cartons shall be clearly printed on one of the largest panel with permanent black ink as follows:

- a. Product name (7/32 to 9/32 inch block letters).
- b. Ingredients (class 1, 2, and 3 - mandatory;
class 4 - not applicable).
- c. Net weight.
- d. Name and address of packer.
- e. Code (same as pouch code, see pouches). 1/ 2/

SECTION D CONTINUED

f. USDA approval stamp for the packers plant (applicable to meat and poultry items only).

g. "Nutrition Facts" label in accordance with the Nutrition Labeling and Education Act (NLEA) and all applicable FDA/USDA regulations.

1/ Code may be ink printed or embossed on the outside of any other panel except the largest panels of the carton.

2/ Official establishment number not required in carton code.

(2) Military nutrition information shall be printed on the large carton panel opposite to the panel printed with the data in D-2,B,(1) above. The information, provided by the contacting officer, shall be clearly printed with permanent black ink in an area no smaller than 4 1/4 inches by 6 3/4 inches as follows:

a. On entrée cartons - the information entitled "Military Rations Are Good Performance Meals".

b. On non-entrée cartons - the information entitled "Nutrition: A FORCE MULTIPLIER".

D-3 PACKING

A. Packing for shipment to ration assembler. Seventy-two pouches (of the same product) in cartons shall be packed flat or on edge in a snug-fitting fiberboard shipping container conforming to style RSC, type CF, class domestic, grade 200 of ASTM D 5118, Standard Practice for Fabrication of Fiberboard Shipping Boxes. Each container shall be securely closed in accordance with ASTM D 1974, Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers.

D-4 MARKING

A. Shipping containers. Shipping containers shall be marked in accordance with DPSC Form 3556, Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence.

SECTION E INSPECTION AND ACCEPTANCEDefinitions.

(1) Critical defect. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.

(2) Major defect. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.

(3) Minor defect. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

E-5 PACKAGING AND PACKING MATERIALSQuality Assurance Provisions.

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required.

A. Packaging and labeling.

(1) Pouch material testing. The pouch material shall be examined for the characteristics listed in table I. The lot size, sample unit, and inspection level criteria are provided for each of the test characteristics. Any test failure shall be classified as a major defect and shall be cause for rejection of the lot.

TABLE I. Pouch material quality assurance criteria

Characteristic	Lot size expressed in	Sample unit	Inspection level
Oxygen transmission rate	yards	1/2 yard	S-1
Water vapor transmission rate	yards	1/2 yard	S-1
Camouflage	yards	1/2 yard	S-1
Thermal processing	pouches	1 pouch	S-2
Environmental conditions	pouches	1 pouch	S-2

(2) Pouch examination. The pouches shall be examined for the defects listed in table II of MIL-PRF-44073E. The lot size shall be expressed in pouches. The sample unit shall be one thermal processed pouch. The inspection level shall be I and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 0.65 for major A defects, 2.5 for major B defects, and 4.0 for minor defects. Two hundred sample units shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot.

SECTION E CONTINUED

(3) Examination of pouch and carton assembly. The completed pouch and carton assemblies shall be examined for the defects listed in table III of MIL-PRF-44073E. The lot size shall be expressed in units of completed assemblies. The sample unit shall be one pouch and carton assembly. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 0.65 for major defects and 2.5 for minor defects. Fifty sample pouch and carton assemblies shall be examined for critical defects. The finding of any critical defect shall be cause for rejection of the lot.

B. Packing.

(1) Shipping container examination. The filled and sealed shipping containers shall be examined for the defects listed below. The sample unit shall be one shipping container fully packed. The lot size shall be expressed in shipping containers. The inspection level shall be S-2 and the AQL shall be 2.5 defects per 100 unit.

TABLE II. Shipping container defects

Category	Defect
<u>Major</u>	
101	Marking omitted, incorrect, illegible of improper size, location sequence or method of application.
102	Any material component missing or damaged or not as specified.
103	Inadequate workmanship. <u>1/</u>
104	Contents more or less than specified.

1/ Inadequate workmanship is defined as, but not limited to incomplete closure of container flaps, loose strapping, inadequate stapling, improper taping, or bulged or distorted container.

E-6 QUALITY ASSURANCE PROVISIONS (PRODUCT)Quality Assurance Provisions.

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required.

A. Classification of inspections. The inspection requirements specified herein are classified as follows:

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(1) Product standard inspection. The first article or product demonstration model shall be inspected in accordance with the provisions of this Performance-based Contract Requirements document and evaluated for overall appearance and palatability. Any failure to conform to the performance requirements or any appearance or palatability failure shall be cause for rejection.

(2) Conformance inspection. Conformance inspection shall include the product examination and the methods of inspection cited in this section.

B. Product examination. The finished product shall be examined for compliance with the performance requirements specified in Section C of this Performance-based Contract Requirements document utilizing the double sampling plans indicated in ANSI/ASQC Z1.4 - 1993. The lot size shall be expressed in pouches. The sample unit shall be the contents of one pouch. The inspection level shall be S-3 and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defects and 4.0 for minor defects. Defects and defect classifications are listed in Table III.

		TABLE III. Product defects 1/ 2/ 3/ 4/			
Category		Defect			
<u>Major</u>	<u>Minor</u>				
		<u>Appearance</u>			
101		Enchilada not a yellow corn tortilla wrapped around beef filling.			
	201	Tortilla not a medium to dark yellow color. <u>5/</u>			
	202	Beef filling not a medium brown color.			
	203	Sauce not a red to reddish-brown color with pieces of tomato, onion, green pepper, herbs, and Mexican-style seasoning and spices.			
	204	Enchilada not intact.			
		<u>Odor and flavor</u>			
102		Odor or flavor not typical of beef enchilada made with yellow corn tortilla, and tomato based sauce with pieces of tomato, onion, green pepper, herbs, and Mexican-style seasoning and spices.			
	205	Enchilada and sauce do not elicit a sensation of medium heat.			

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		TABLE III. Product defects 1/ 2/ 3/ 4/			
Category		Defect			
<u>Major</u>	<u>Minor</u>				
		<u>Texture</u>			
103		Tortilla not soft.			
	206	Beef not finely ground or not moist.			
	207	Sauce not moderately thick with pieces of tomato, onion, green pepper, and herbs.			
		<u>Weight</u>			
	208	Net weight of an individual pouch less than 7.5 ounces. <u>6/</u>			

1/ Presence of any foreign material such as, but not limited to dirt, insect parts, hair, glass, wood or metal, or foreign odors and flavors such as, but not limited to burnt, scorched, rancid, sour, stale, musty, or moldy shall be cause for rejection of the lot.

2/ Finished product not equal to or better than the approved product standard in palatability and overall appearance shall be cause for rejection of the lot.

3/ Verification of the enriched corn meal shall be with the statement of ingredients on the label.

4/ Beef filling weight requirement for enchilada shall be verified with a certificate of conformance.

5/ Reddish color from absorbed sauce shall not be scored as a defect.

6/ If the sample average net weight is less than 8.0 ounces, the lot shall be rejected.

C. Methods of inspection.

(1) Commercial sterility. Testing for commercial sterility shall be in accordance with MIL-PRF-44073.

(2) Shelf life. The contractor shall provide a certificate of conformance that the product has a 3 year shelf life when stored at 80°F. Government verification may include storage for 6 months at 100°F or 36 months at 80°F. Upon completion of either storage period, the product will be subjected to a sensory evaluation panel for appearance and palatability and must receive an overall score of 5 or higher based on a 9 point hedonic scaled to be considered acceptable.

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(3) Net weight. The net weight of the filled and sealed pouches shall be determined by weighing each sample on a suitable scale tared with a representative empty pouch. Results shall be reported to the nearest 0.1 ounce.

(4) Nutrient content. The sample to be analyzed shall be a composite of eight filled and sealed pouches, which have been selected at random from the lot. The composited sample shall be prepared (see Note) and analyzed for protein content, fat content, and salt content in accordance with the following methods of the Official Methods of Analysis of AOAC International:

<u>Test</u>	<u>Method Number</u>
Protein	988.05, 992.15
Fat	960.39, 985.15
Salt	935.47

Test results shall be reported to the nearest 0.1 percent. Any result not conforming to the requirements specified in Section C of this Performance-based Contract Requirements document shall be cause for rejection of the lot.

NOTE: The USDA will use AOAC method 983.18 for preparation of the sample.

SECTION J REFERENCE DOCUMENTS

DPSC FORM

DPSC FORM 3556 Marking Instructions for Shipping Cases, Sacks and
Palletized/Containerized Loads of Perishable and Semiperishable
Subsistence, May 96

MILITARY SPECIFICATION

MIL-PRF-44073 - Packaging of Food in Flexible Pouches

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

ANSI/ASQCZ1.4-1993 - Sampling Procedures and Tables for Inspection by
Attributes

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1974 - Standard Practice for Methods of Closing, Sealing, and
Reinforcing Fiberboard Shipping Containers

D 5118 - Standard Practice for Fabrication of Fiberboard Shipping
Boxes

AOAC INTERNATIONAL

Official Methods of Analysis of the AOAC International

TO: DSCP-HRAA (LeCollier/3625)

Subject: (ES02-105) Technical Inquiry; Various MRE Documents (listing below); Clarify Carton labeling information

Ref: Quality Summit Mar 13, 2002, Industry One on One Sessions.

1. Based on discussions at referenced meeting, the U.S. Army Soldier and Biological Chemical Command, Soldier Systems Center (SBCCOM) has decided to clarify the carton labeling information since the requirement as written has been misinterpreted.

2. SBCCOM requests that DSCP implement the following change to the listed subject documents for all current, pending and future procurements until the documents are formally amended or revised:

In Section D, D-2 Labeling, B Cartons: Delete Footnote 1 entirely and insert:

"1/ Code may be ink printed on any outside carton panel. Code may be embossed on any outside carton panel except the largest panels of the carton."

3. The affected MRE entrée related documents are as follows:

Clam Chowder, New England style, Pouch	PCR-C-045	25 Oct 01
Pork Rib, Boneless, Imitation, Pouch	PCR-P-028	25 Oct 01
Fruits, Wet Pack, Pouch	PCR-F-002A	24 Oct 01
Vegetable Manicotti, Pouch	PCR-V-002	24 Oct 01
Beef Roast w/Vegetables, Pouch	PCR-B-035	24 Oct 01
Chili and Macaroni, Pouch	PCR-C-027	15 Nov 00
Beef Stew, Pouch	PCR-B-020	15 Nov 00
Beef Ravioli in Meat Sauce, Pouch	PCR-B-021	15 Nov 00
Beef w/Mushrooms in Sauce, Pouch	PCR-B-022	15 Nov 00
Beef Patty, Grilled, Pouch	PCR-B-029	15 Nov 00
Beefsteak, Grilled w/Mushroom Gravy, Pouch	PCR-B-030	15 Nov 00
Pork Chop, Jamaican, Pouch	PCR-P-012	15 Nov 00
Seafood Tortellini, Pouch	PCR-S-011	15 Nov 00
Turkey Breast, in Gravy w/Potatoes, Pouch	PCR-T-004	15 Nov 00
Country Captain Chicken, Pouch	PCR-C-019A	31 Jul 00
Jambalaya w/Ham & shrimp, Pouch	PCR-J-001	30 Sep 99
Beef Enchilada in Sauce, Pouch	PCR-B-010(1)	30 Sep 99
Potatoes, Mashed, Pouch	PCR-P-011	30 Sep 99
Black Bean and Rice Burrito, Pouch	PCR-B-0002	17 Dec 97
Spaghetti w/Meat Sauce, Pouch	PCR-S-0002	5 Nov 97
Pork Chow Mein, Pouch	PCR-P-0002	5 Nov 97
Chicken and Rice, Pouch	PCR-C-0005	5 Nov 97
Chicken Stew, Pouch	PCR-C-0006	5 Nov 97
Beef Frankfurters, Pouch	PCR-B-0003	5 Nov 97
Pasta w/Vegetables in Cheese Sauce, Pouch	PCR-P-0001	22 Sep 97
Noodles, Buttered, Pouch	PCR-N-0001	22 Sep 97
Meatloaf w/Gravy, Pouch	PCR-M-0001	22 Sep 97
Chicken Breast w/Salsa, Pouch	PCR-C-0002	22 Sep 97
Chicken Breast in Thai Sauce, Pouch	PCR-C-0003	22 Sep 97
Beef in Teriyaki Sauce w/Vegetables, Pouch	PCR-B-0001	22 Sep 97

4. Several MRE related component documents, i.e. breads, cakes, cookies, do not require a carton.

5. Several MRE entrée related documents from the Oct 1998 time frame did not contain the specific labeling of pouches and cartons inclusively. They referenced MIL-PRF-44073 in the Section D requirements.

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6. Therefore, SBCCOM requests that DSCP implement the following change to the Quality Assurance Provisions and Packaging Requirements for MIL-PRF-44073E Packaging of Foods in Flexible Pouches for all current and pending procurements until the document is formally amended or revised:

In III, A, 1 Labeling and marking, b, Cartons: Delete Footnote 1 entirely and insert:

"1/ Code may be ink printed on any outside carton panel. Code may be embossed on any outside carton panel except the largest panels of the carton."

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